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Yang
Docket No.: 199372005800
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Takayuki TOSHIMA et al.

Serial No.: 10/591,971

Filing Date: September 7, 2006

For: SUBSTRATE PROCESSING SYSTEM,
SUBSTRATE PROCESSING METHOD,
RECORDING MEDIUM AND
SOFTWARE

Examiner: Unknown

Group Art Unit: Unknown

TRANSMITTAL

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

With reference to the subject application, enclosed is a copy of the English translation of the International Preliminary Report on Patentability as issued in International Patent Application No. PCT/JP2005/005506. Please make this document of record in the present application.

In the event the U.S. Patent and Trademark Office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection

with the filing of this document to Deposit Account No. 03-1952 referencing Docket No. 199372005800. However, the Director is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: February 7, 2007

Respectfully submitted,

By 
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From the INTERNATIONAL BUREAU

PCT

NOTIFICATION OF TRANSMITTAL
OF COPIES OF TRANSLATION
OF THE INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY
(CHAPTER I OR CHAPTER II)
OF THE PATENT COOPERATION TREATY)
(PCT Rules 44bis.3(c) and 72.2)

To:

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Kyowa Patent & Law Office
Room 323, Fuji Bldg.
2-3, Marunouchi 3-chome
Chiyoda-ku Tokyo
1000005
JAPON



Date of mailing (day/month/year) 26 October 2006 (26.10.2006)	
Applicant's or agent's file reference 152716-289	IMPORTANT NOTIFICATION
International application No. PCT/JP2005/005506	International filing date (day/month/year) 25 March 2005 (25.03.2005)
Applicant TOKYO ELECTRON LIMITED et al	

1. Transmittal of the translation to the applicant.

The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter I).

The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).

2. Transmittal of the copy of the translation to the designated or elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

None

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EG, EP, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Yoshiko Kuwahara
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PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 152716-289	FOR FURTHER ACTION		See item 4 below
International application No. PCT/JP2005/005506	International filing date (day/month/year) 25 March 2005 (25.03.2005)	Priority date (day/month/year) 02 April 2004 (02.04.2004)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant TOKYO ELECTRON LIMITED			

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).
2. This REPORT consists of a total of 6 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

<input checked="" type="checkbox"/>	Box No. I	Basis of the report
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input checked="" type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

Date of issuance of this report 19 October 2006 (19.10.2006)

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Yoshiko Kuwahara e-mail: pt07@wipo.int
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PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

PCT

TRANSLATION

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Applicant's or agent's file reference 152716-289		Date of mailing (day/month/year)	
International application No. PCT/JP2005/005506		FOR FURTHER ACTION See paragraph 2 below	
International filing date (day/month/year) 25.03.2005			Priority date (day/month/year) 02.04.2004
International Patent Classification (IPC) or both national classification and IPC			
Applicant TOKYO ELECTRON LIMITED			

1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP	Authorized officer
Facsimile No.	Telephone No.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/005506

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. **type of material**
 a sequence listing
 table(s) related to the sequence listing
 - b. **format of material**
 in written format
 in computer readable form
 - c. **time of filing/furnishing**
 contained in the international application as filed.
 filed together with the international application in computer readable form.
 furnished subsequently to this Authority for the purposes of search.
3. In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/JP2005/005506

Box No. IV Lack of unity of invention

1. In response to the invitation (Form PCT/ISA/206) to pay additional fees the applicant has:
 paid additional fees
 paid additional fees under protest
 not paid additional fees
2. This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is
 complied with
 not complied with for the following reasons:

A substrate treating apparatus comprising (1) a treating tank for treating a substrate with a treating liquid, (2) a drying section disposed above the treating tank, and (3) a moving mechanism for moving the substrate between the treating tank and the drying section is well known (for example, see JP, 2003-279246, A and JP, 10-199850, A). Further, the subject matter of claim 1 is described in JP, 2003-279246, A.

So, the present application is found to include the following five inventions.

- (1) Claims 1 and 2
- (2) Claim 3
- (3) Claims 4-7
- (4) Claims 8-11
- (5) Claims 12-19

4. Consequently, this opinion has been established in respect of the following parts of the international application:

all parts
 the parts relating to claims Nos. _____

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/JP2005/005506

Box No. V **Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	2-7, 9, 10, 12-19	YES
	Claims	1, 8, 11	NO
Inventive step (IS)	Claims	12, 15-17	YES
	Claims	1-11, 13, 14, 18, 19	NO
Industrial applicability (IA)	Claims	1-19	YES
	Claims		NO

2. Citations and explanations:

Document 1: JP, 2003-279246, A (Dainippon Screen Mfg. Co., Ltd.), 2 October, 2003 (02.10.03), full text, Figs. 1-9

Documents 2: JP, 2003-257926, A (Kaijo Corp.), 12 September, 2003 (12.09.03), paragraphs [0041] and [0062], Figs. 1 and 8

Document 3: JP, 2001-51428, A (Fuji Photo Film Co., Ltd.), 23 February, 2001 (23.02.01), paragraphs [0075] and [0076], Fig. 4

Document 4: JP, 8-148465, A (Dainippon Screen Mfg. Co., Ltd.), 7 June, 1996 (07.06.96), full text, Figs. 1-9

Document 5: JP, 2002-231685, A (Apet Co., Ltd.), 16 August, 2002 (16.08.02), full text, Figs. 1 and 2

Document 6: JP, 2001-144065, A (Tokyo Electron Ltd.), 25 May, 2001 (25.05.01), paragraphs [0033]-[0037], Figs. 5-8

The subject matter of claim 1 does not appear to be novel or to involve an inventive step, since it is described in document 1.

The subject matter of claim 2 does not appear to involve an inventive step in view of documents 1 and 2. It is considered to be obvious for a person skilled in the art to apply the constitution described in document 2, in which heated nitrogen gas is supplied as a drying gas (treating gas) while nitrogen gas of room temperature is supplied as an inert gas, to document 1.

The subject matter of claim 3 does not appear to involve an inventive step in view of documents 1 and 3. It is considered to be obvious for a person skilled in the art to apply the constitution of a horizontal waste heat duct 290 described in document 3 as the constitution of the exhaust nozzle described in document 1.

The subject matters of claims 4 and 7 do not appear to involve an inventive step in view of documents 1 and 4. It is considered to be obvious for a person skilled in the art to apply the structure of communicating with open air described in document 4 to the invention described in document 1.

The subject matter of claim 5 does not appear to involve an inventive step in view of documents 1, 4 and 5. Considering the constitution described in document 5, in which when a chemical liquid exists in a treating tank, the atmosphere above the treating tank is allowed to communicate with open air and in which when the chemical liquid is replaced by a rinse in the treating tank, a dry treatment section shielded from the open air is disposed above the treating tank, it is considered to be obvious for a person skilled in the art to switch a dry treatment section into a state shielded from open air when the chemical liquid in a treatment tank is replaced by a rinse.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/JP2005/005506

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

The subject matter of claim 6 does not appear to involve an inventive step in view of documents 1, 4 and 6. Document 6 describes a constitution in which a cover is opened or closed to allow communication with or shielding from open air.

The subject matters of claims 8 and 11 do not appear to be novel or to involve an inventive step, since they are described in document 4.

The subject matter of claim 9 does not appear to involve an inventive step in view of documents 4 and 5. Document 5 describes a constitution, in which when a chemical liquid exists in a treating tank, the atmosphere above the treating tank is allowed to communicate with open air and in which when the chemical liquid is replaced by a rinse in the treating tank, a dry treatment section shielded from the open air is disposed above the treating tank.

The subject matter of claim 10 does not appear to involve an inventive step in view of document 4 and 6. Document 6 describes a constitution in which a cover is opened or closed to allow communication with or shielding from open air.

The subject matters of claims 13, 14, 18 and 19 do not appear to involve an inventive step in view of documents 4-6. Document 4 describes a constitution in which the area of the portion of a dry treatment section communicating with open air during the step of chemical liquid treatment is kept smaller than the area of the portion of the dry treatment section communicating with open air when a substrate is carried in. So, it is considered to be obvious for a person skilled in the art that when the constitution of opening or closing a cover for allowing communication with or shielding from open air is employed, the distance between the opening and the cover is kept smaller during the step of chemical liquid treatment than when a substrate is carried in.

The subject matters of claims 12 and 15-17 are neither described in any of the documents cited in the ISR nor obvious to a person skilled in the art.